



Maryland

Department of the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

October 10, 2018

Re: Notice of Permit Decision
Nontidal Wetlands and Waterways Permit Application
Tracking Number 18-NT-0086/201860368

Dear Property Owner, Public Official, or Interested Person:

After examination and consideration of the documents received and evidence in the application file and record for the Stage 1 of the I-95 Section 200 Improvements project, the Water and Science Administration has determined that the application meets the statutory and regulatory criteria necessary for issuance of a Nontidal Wetlands and Waterway Permit. Copies of the Notice of Decision, Summary of the Basis for Decision, Nontidal Wetlands and Waterways Permit, Impact Vicinity and Key Maps and the Water Quality Certification are enclosed with this permit decision. The plan view sheets that correspond to the Impact Vicinity and Key Maps are available at the MDE website under the Public Information heading using the following link: <http://mde.maryland.gov/programs/Water/WetlandsandWaterways/Pages/index.aspx> Hard copies can also be requested from the MDE Wetlands and Waterways office at 410-537-3456.

This is a final agency determination; there is no further opportunity for administrative review. Any person with standing, who is either the applicant or who participated in the public participation process through the submission or written or oral comments may petition for judicial review in the Circuit Court in the County where the permitted activity is to occur. The petition for judicial review must be filed within 30 days of the publication of the permit decision. Please see the attached Fact Sheet for additional information about the judicial review process.

If you have any questions or need any additional information, please do not hesitate to contact Amanda Sigillito, Chief, Nontidal Wetlands Division at 410-537-3766.

Sincerely,

Denise M. Keehner, Program Manager
Wetlands and Waterways Program

as/dk

Enclosures

FACT SHEET JUDICIAL REVIEW PROCESS

Permits can be challenged through a request for direct judicial review in the Circuit Court for the county where the activity authorized by the permit will occur. Applicants, and persons who meet standing requirements under federal law and who participated in a public comment process by submitting written or oral comments (where an opportunity for public comment was provided), may seek judicial review. Judicial review will be based on the administrative record for the permit compiled by the Department and limited to issues raised in the public comment process (unless no public comment process was provided, in which case the review will be limited to issues that are germane to the permit).

Who Has Standing?

Anyone who meets the threshold standing requirements under federal law and is either the applicant or someone who participated in the public participation process through the submission of written or oral comments, as provided in Environment Article § 5-204, Annotated Code of Maryland. The three traditional criteria for establishing standing under federal law are injury, causation, and redressability, although how each criterion is applied is highly fact-specific and varies from case to case. Further, an association has standing under federal law to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.

What is the Procedure for Seeking Judicial Review?

Petitions for judicial review of a final determination or permit decision subject to judicial review must be filed in accordance with § 1-605 of the Environment Article no later than 30 days following publication by the Department of a notice of final determination or final permit decision and must be filed in the circuit court of the county where the permit application states that the proposed activity will occur. Petitions for judicial review must conform to the applicable Maryland Rules of Civil Procedure.

To review the legislation follow the link below:

http://mlis.state.md.us/2009rs/chapters_noln/Ch_650_sb1065T.pdf

For a complete list of permits that these procedures apply to follow the link below:

http://www.mde.state.md.us/programs/ResearchCenter/LawsandRegulations/Pages/ResearchCener/laws_regs/jrproc.aspx

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER AND SCIENCE ADMINISTRATION
NOTICE OF DECISION

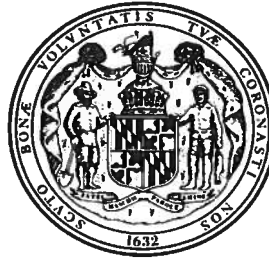
In the Matter of: Maryland Transportation Authority
Nontidal Wetlands and Waterways Permit
Application Number 18-NT-0086/201860368

Hearing Date: July 31, 2018

Hearing Location: Joppa-Magnolia Volunteer Fire Company
1403 Old Mountain Road South,
Joppa, Maryland 21085

Decision: Approval

Date: October 10, 2018



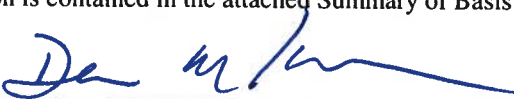
The review of the Nontidal Wetlands and Waterways Permit Application in the above-referenced matter has been governed by criteria set forth under Title 5, Subtitle 5, Environment Article, Annotated Code of Maryland, entitled Appropriation or Use of Waters, Reservoirs, and Dams; Subtitle 9, Environment Article, Annotated Code of Maryland, entitled Nontidal Wetlands; and Code of Maryland Regulations (COMAR) Title 26, Subtitle 17, Chapter 04, Construction on Nontidal Waters and Floodplains and Subtitle 23 Nontidal Wetlands. The Nontidal Wetlands and Waterways Permit Application has been reviewed for compliance with Maryland water quality standards under COMAR Title 26, Subtitle 08, Chapter 02 Water Quality.

After examination of all documents and evidence in the above-referenced matter, I have determined that:

1. The applicant has demonstrated a need for impacts to nontidal wetland and waterways;
2. The applicant has and will continue to minimize impacts to nontidal wetlands and waterways to the extent practicable;
3. No rare, threatened or endangered species have been identified in the area of impact for the proposed project;
4. No historical or archeological sites have been identified in the area of impact for the proposed project;
5. The project is consistent with State water quality requirements;
6. Public notice and public informational hearing requirements have been satisfied; and,
7. The applicant has demonstrated that the project has independent utility from any potential future projects.

Nontidal Wetlands and Waterways Permit Application 18-NT-0086/201860368 meets the criteria set forth in statute and regulation governing impacts to wetlands and waterways. Nontidal Wetlands and Waterways Permit Number 18-NT-0086/201860368 may be issued by the Water and Science Administration to authorize Maryland Transportation Authority Segment Nos. KH-3009, KH-3010, KH-3012, and KH-3014 to add a two-lane express toll lane (ETL) on northbound I-95 from MD 43 to MD 152 and an auxiliary lane from MD 152 to MD 24; replace the Raphel Road Overpass, and the Old Joppa Road Overpass; reconstruct and widen the bridge decks on the Big Gunpowder, and Little Gunpowder bridges; construct two noise walls; relocate utilities; provide a new Intelligent Transportation System (ITS) communication system to improve operations and incident management along both northbound and southbound I-95; and conduct stream restoration at the Carsin's Run Stream Mitigation Site, MD 7 Fish Passage Mitigation Site, and onsite stream mitigation; and use of temporary erosion and sediment controls. The approved work will result in impacts to 21,353 square feet of forested nontidal wetland, 728 square feet of scrub shrub nontidal wetland, 6,396 square feet of emergent nontidal wetland, 94,473 square feet of the 25-foot nontidal wetland buffer, 2,086 linear feet of perennial waterways, 3,608 linear feet of intermittent waterways, and 254,688 square feet of 100-year floodplain. Temporary impacts include 22,930 square feet of forested nontidal wetland, 10,534 square feet of emergent nontidal wetland, 44,688 square feet of the 25-foot nontidal wetland buffer, 446 linear feet of perennial waterways, and 26,655 square feet of 100-year floodplain. The project is located on I-95 from MD 43 to MD 24 in Baltimore and Harford Counties, with proposed mitigation sites in Baltimore, Harford, and Cecil Counties.

A brief explanation of the rationale for this decision is contained in the attached Summary of Basis for Decision.


Denise M. Keehner
Program Manager
Wetlands and Waterways Program

SUMMARY BASIS FOR DECISION

Name of Applicant:
Maryland Transportation Authority (MDTA)

Application Number:
18-NT-0086/201860368

Project Manager: Emily Dolbin

Date of Decision: October 10, 2018

The Environment Article, Annotated Code of Maryland and the Code of Maryland Regulations establish criteria for the Maryland Department of the Environment (Department or MDE) to consider when evaluating projects that propose to change the course, current or cross section of a nontidal stream or other body of water or to impact a nontidal wetland. If the criteria are satisfied, the Department may issue a permit for the proposed activity. The Department may deny a permit for a waterway construction activity that it believes is inadequate, wasteful, dangerous, impracticable or detrimental to the best public interest. The Department may not issue a nontidal wetland permit for a regulated activity unless it finds that the Applicant has demonstrated that a regulated activity, which is not water-dependent, has no practicable alternative, will minimize alteration or impairment of the nontidal wetlands, and will not cause or contribute to a degradation of ground or surface waters.

In the case of the proposed Stage 1 of the I-95 Section 200 Improvements the question for the Department to address is whether or not the proposed project impacts are acceptable under the regulations as they pertain to such construction activities (see Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal, or Nontidal Wetland in Maryland [Application] dated March 2, 2018, in file). The work includes adding a two-lane express toll lane (ETL) on northbound I-95 from MD 43 to MD 152; an auxiliary lane from MD 152 to MD 24; replacement of the Raphael Road Overpass, and the Old Joppa Road Overpass; reconstructing and widening the bridge decks on the Big Gunpowder, and Little Gunpowder bridges; construction of two noise walls; utility relocations; providing a new Intelligent Transportation System (ITS) communication system to improve operations and incident management along both northbound and southbound I-95; stream restoration at the Carsin's Run Stream Mitigation Site, the MD 7 Fish Passage Mitigation Site, and an onsite stream mitigation site; and, use of temporary erosion and sediment controls. This permit authorizes permanent impacts to 21,353 square feet of forested nontidal wetland, 728 square feet of scrub-shrub nontidal wetland, 6,396 square feet of emergent nontidal wetland, 94,473 square feet of the 25-foot nontidal wetland buffer, 2,086 linear feet of perennial waterways, 3,608 linear feet of intermittent waterways, and 254,688 square feet of 100-year nontidal floodplain. Temporary impacts include 22,930 square feet of forested nontidal wetland, 10,534 square feet of emergent nontidal wetland, 44,688 square feet of the 25-foot nontidal wetland buffer, 446 linear feet of perennial waterways, and 26,655 square feet of 100-year nontidal floodplain. The project is located on I-95 from MD 43 to MD 24 in Baltimore and Harford Counties, with proposed mitigation sites in Baltimore, Harford, and Cecil Counties. Due to the schedule of the project, each segment is under a separate design schedule (e.g. Segments KH-3009, KH-3010, and KH-3014); however, the segments were permitted together as part of a single and complete project with independent utility. Therefore, the design is subject to change as the design schedules progress. Any changes relating to impacts shall be reviewed and approved by the Department as required by the Special Conditions of the Permit (see Nontidal Wetlands and Waterways Permit [Permit] dated October 10, 2018, in file).

PUBLIC NOTICE

Adjoining property owners, local government officials, and other interested persons must be notified of proposed impacts to nontidal wetlands and waterways. In addition, an opportunity to comment and request a public informational hearing must be provided via a local newspaper. The public notice for this application was published in *The Jeffersonian* on June 21, 2018, *The Aegis* on June 20, 2018, and *The*

Cecil Whig on June 20, 2018. Project plans were made available at the Baltimore County Public Library, White Marsh Branch (8133 Sandpiper Circle, Baltimore, Maryland 21236), the Harford County Public Library, Aberdeen Branch (21 Franklin Street, Aberdeen, Maryland 21001), the Cecil County Public Library, North East (106 West Cecil Avenue, North East, Maryland 21901), and online at mdta.maryland.gov/I95ETLNB/Environmental.html (see Certificate of Publications, June 20, 2018 and Public Notice, in file).

A public informational hearing was requested for this project and was held on July 31, 2018 at the Joppa-Magnolia Volunteer Fire Company at 1403 Old Mountain Road South, in Joppa, Maryland. Comments were provided during the public notice period, during the public informational hearing, and additional correspondence was received prior to the closure of the formal record on August 14, 2018 either via phone, letter, or email. Comments received during the public comment period included questions from property owners about how their properties will be affected; inquiries regarding impacts to resources, including the location of stream impacts and their tributaries, and if additional degraded streams could be restored; questions about the purpose and need of the project and whether other forms of transportation, specifically rail transportation, had been considered; questions about whether the project as proposed would alleviate traffic issues; concerns about the protection of wetlands and the effectiveness of mitigation projects; concerns about noise associated with roadway construction; inquiries about roadway runoff; a request for independent documentation of the roadway construction; attending an advisory meeting; flooding concerns near the noise walls; and requests for access to plans and impact plates. No other comments relating to wetland or waterway impacts were received (see Public Comment Log and Public Hearing Transcript dated July 31, 2018, in file). Responses to comments raised at the public informational hearing and during the public comment within the Department's purview will be addressed in the appropriate sections that follow.

A request that MDE attend the next Joppa Community Advisory Board (Board) meeting was received during the public informational hearing. The Department's role in this project is to review proposed impacts to regulated resources. It is the Applicant's responsibility to present and explain the project as proposed. The Applicant plans to attend a future Board meeting. Leading up to the hearing, MDTA has engaged in public outreach efforts for the current project starting in December 2017, which included Baltimore and Harford County government briefings, emergency medical services (EMS) and public school transportation service meetings; Baltimore City government coordination briefings; Maryland Department of Transportation (MDOT) and Maryland State Highway Administration (SHA) briefings; public meetings on February 26 and 27, 2018; Baltimore Metropolitan Council (BMC) Public and Technical Advisory Committee meetings; homeowner meetings; and BMC Statewide Transportation Improvement Program public meetings (see Comment Response Letter dated August 15, 2018).

Noise concerns were also mentioned during the public hearing. MDTA is installing two noise walls as part of this project; however, the determination regarding the locations of the noise walls is out of the Department's purview. In response to comments received regarding the historic Onion-Rawl House, the Applicant is reviewing the property in relation to the State of Maryland noise policy (see Hearing Transcripts, and August 17, 2018 Comment Responses, in file).

PROJECT PURPOSE AND NEED

In order for the Department to authorize impacts to nontidal wetlands and their regulated buffers, regulated activities must be determined to be necessary and unavoidable to meet the basic project purpose. It is also important to note that the orderly development and use of land is regulated through planning and zoning controls implemented by the local government. In this particular instance, Baltimore, Harford, and Cecil Counties make the decision about appropriate land use of the property.

The primary need for this project is to address capacity and safety needs along Section 200 of I-95 in Baltimore and Harford Counties. The purpose of this project is to address these needs and improve access, mobility and safety for local, regional, and inter-regional traffic, including passenger, freight, and transit vehicles. The MDTA plans to address the project need in Stage 1 of the I-95 Section 200 Improvements by adding a two-lane ETL on northbound I-95 from MD 43 to MD 152; an auxiliary lane from MD 152 to MD 24; replacement of the Bradshaw Overpass (no impacts to resources), Raphael Road Overpass, and the Old Joppa Road Overpass; reconstructing and widening the bridge decks on the Big Gunpowder and Little Gunpowder bridges; construction of two noise walls; utility relocations; and providing a new ITS communication system to improve operations and incident management along both northbound and southbound I-95. The need for this project was identified in the I-95 Master Plan, which was adopted by MDTA in April of 2003. This master plan identified four independent projects for each section of I-95 that MDTA owns and operates in the state of Maryland, one of which being Section 200, and presented long-range transportation needs that establish clear goals for system maintenance, preservation and enhancement (see Application dated March 2, 2018 and Section 200 Finding of No Significant Impact [FONSI] dated December 2010, in file).

The Applicant determined that there is insufficient capacity along Section 200 of I-95. The southbound lanes of I-95 between MD 43 and MD 24 operate at a Level of Service (LOS) D to E during the morning peak hours and the northbound lanes operate at a LOS E during PM peak hours. On Friday and weekend peak periods, traffic is operating at full capacity. Congestion is expected to grow from less than 10 to over 30 hours per week by the year 2030, which is a 300 percent increase. By 2030, weekend peak hours for Section 200 are projected to operate at a LOS F (see Section 200 FONSI dated December 2010, in file).

The Applicant also considered safety concerns when identifying the need for this project. MDTA identified the crash rate for Section 200 as approximately 12 percent higher than the rate of similar state maintained highways. Crashes identified as congestion related, including side-swipes and rear-ends, account for 50 percent of the crashes reported between 2002 and 2004. Section 200 has been identified with 34 Candidate Safety Improvement Locations (CSILs) by SHA. MDTA has determined that an increase in the number and severity of congestion related crashes are likely to increase if Section 200 congestion levels are not addressed (see Section 200 FONSI dated December 2010, in file).

As part of the FONSI Reevaluation, the Applicant conducted additional analysis and studies in 2017 and 2018 to prioritize the immediate congestion, safety, and operational concerns of the corridor, which resulted in the current project (see Section 200 Reevaluation dated May 2018, in file). The Department has determined that the Applicant has satisfied the requirements for the project purpose and need.

ALTERNATIVES ANALYSIS

For projects that are not water-dependent, the Applicant must conduct an alternatives analysis to demonstrate that the project has no practicable alternative. The factors to be considered are whether the project purpose can be accomplished using one or more alternative sites in the general area; a reduction in the size, scope, configuration or density would result in less impact; the Applicant made a good faith effort to accommodate the site constraints that caused the alternative sites to be rejected; and that the regulated activity is necessary for the project to meet a demonstrated public need.

Three alternatives were chosen to be carried forward as a part of the Alternatives Retained for Detailed Study (ARDS) in the Section 200 FONSI. These alternatives were chosen based upon public feedback, engineering traffic analysis, right-of-way impacts, environmental impacts, and viability and interchange options. During the development of these alternatives, MDTA coordinated with BMC and Maryland

Transit Administration (MTA) on potential maximum transit ridership. MTA's transit plan for this part of the region includes the Maryland Rail Commuter (MARC) Investment Plan and express/local bus service enhancements. A separate rail facility was not included within MTA or BMC's regional transit improvements along this I-95 corridor. Therefore, improving intermodal connectivity, including access to the existing transit and rail network, was the primary focus for determining this project's selected alternative (SA) (see Section 200 FONSI dated December 2010, email from MDTA dated August 6, 2018, and Comment Response Letter dated August 15, 2018, in file).

Alternative 1 analyzed a no-build option, would have allowed for maintenance improvements and safety upgrades including replacement of bridge decks, resurfacing of pavement, and replacement and upgrades to traffic barriers, signs and lights, while retaining the existing I-95 highway. This alternate was rejected because it would not fulfill the purpose and need of the project (see Section 200 FONSI dated December 2010, in file).

The second alternative was the GPLs Alternative, which included constructing additional GPLs along the mainline of I-95 from north of MD 43 to north of MD 22 to accommodate the proposed traffic demand. This alternative would create a total of six GPLs in each direction from the northern limit of the I-95 ETLs Project to the MD 24 interchange. This alternative would improve the configuration at the MD 152, MD 24, MD 543 and MD 22 interchanges. The GPLs Alternative was not chosen as the SA because the number of accessible travel lanes would make it difficult to implement a travel demand management program. Based on the FONSI, this option would increase congestion levels on all lanes, and has less incentive for transit or carpooling. Additionally, this alternative created the need for drivers to weave in and out of five to six lanes to exit the highway. This creates more opportunities for crashes to occur and difficulty for disabled vehicles to access the shoulder (see Section 200 FONSI dated December 2010, in file).

The third option, which was chosen as the SA, included adding ETLs to the existing roadway to accommodate the anticipated traffic demand. Under this alternative, I-95 would have four GPLs and two ETLs in each direction, extending from just north of MD 43 to MD 24. This alternative also proposed improvements to the configuration of the MD 152 and MD 24 interchanges. The SA would provide congestion management through a consistently congestion-free travel option, which would continue to be available even as traffic volumes increase over time. The ETLs are anticipated to operate at a superior LOS compared to the LOS of the GPLs in both alternatives by providing predictable and dependable travel times and speeds. Additionally, GPL drivers maximum weave is four lanes and ETL drivers is one lane, which reduces opportunities for crashes and provides easier access to the shoulder for disabled vehicles (see Section 200 FONSI dated December 2010, in file).

Since the Selected Alternative (SA) was determined, no major changes to the design have been made and only minor design changes have occurred; however, funding, as well as a series of analyses and studies conducted in 2017 and 2018 were considered when determining how to prioritize the Section 200 improvements and the project was split into two stages. The current project is referred to as Stage 1 of the Section 200 improvements which includes the area from north of MD 43 to MD 24. The current design (CD) for Phase 1 includes construction of two ETLs along northbound I-95 from Section 100 (north of MD 43) to south of MD 152 by widening into the median where possible and to the outside for the remainder. The on-ramp from MD 152 will be extended as an auxiliary lane to the MD 24/MD 924 off-ramp. Additionally, there will be construction of two noise walls, installation of ITS technology and reconstruction of the I-95 overpass bridges at Bradshaw, Old Joppa and Raphel Roads to accommodate the additional travel lanes (see Section 200 FONSI dated December 2010 and Section 200 Reevaluation dated May 2018, in file). The Department has determined that the Applicant has satisfied the requirements for the project alternatives analysis.

AVOIDANCE AND MINIMIZATION

If the alternative site analysis is accepted, the Applicant must demonstrate that adverse impacts to nontidal wetlands, their regulated buffers, and the 100-year frequency floodplain are necessary and unavoidable.

The Applicant has taken measures to avoid and minimize impacts to regulated resources to the greatest extent practicable while still meeting the purpose and need of the project. During the planning and design phases, the following design changes were made in order to avoid and minimize impacts: the proposed ITS fiber-optic cable installation will occur parallel to I-95 between the guardrail and the light poles, where the least natural resources are present; abutments for noise walls proposed adjacent to bridges will not be constructed in streams or the floodplain; widening will occur within the median and an extra lane will be created using the existing outside shoulder between New Forge Road and Bradshaw Road to avoid impacts along the roadway; roadway shoulders have been reduced in width from the American Association of State Highway and Transportation Officials (AASHTO) preferred width to the minimum width; and retaining walls have been incorporated in six areas to minimize impacts to resources along the roadway by eliminating the need for an extended roadway slope (see Application dated March 2, 2018 and Avoidance and Minimization of Impacts Memo, in file).

MDTA has determined that the proposed impacts are unavoidable in order to meet the purpose and need of the project. The majority of proposed impacts are associated with proposed widening, stormwater management practices, and noise walls required to mitigate noise impacts to adjacent communities. The majority of resources being impacted are lower quality. MDTA anticipates that stormwater management practices will improve the quality of adjacent resources that currently receive large amounts of unattenuated stormwater runoff from I-95. The impacts due to outside widening between MD 24 and MD 152 are unavoidable due to median site area constraints and drainage conflicts. Oversized headwalls will be used to reduce the length of the culvert extensions in order to minimize stream impacts. MDTA proposes to use the steepest slopes allowable on the backside of required Environmental Site Design (ESD) facilities to reduce wetland impacts. An intermittent channel located along the I-95 roadway embankment between MD 24 and Winters Run will be relocated and stabilized onsite instead of being piped (see Application dated March 2, 2018 and Avoidance and Minimization of Impacts Memo, in file).

During the hearing, questions were asked regarding what the Department considers permanent versus temporary impacts. A wetland impact is typically considered permanent when regulated activities change the topography and hydrology of the wetland, which causes the wetland to lose its functions and values. Impacts are considered temporary when the effected wetland will be restored to original grade with no loss of hydrology or functions. Permanent impacts to wetlands require mitigation, and temporary impacts to wetlands or impacts to the wetland buffer or expanded buffer do not require mitigation (see Maryland Nontidal Wetland Mitigation Guidance dated January 2011, in file).

The design is subject to change due to the design schedule and phasing of this project and any changes relating to impacts will be reviewed and approved by the Department. MDTA is investigating additional avoidance and minimization measures as the design progresses, including use of additional retaining walls, directional drilling of fiber-optic cable beneath resources, and in-kind replacement of regulated roadside ditches onsite. Special Condition No. 1 has been included in the Permit in order to ensure avoidance and minimization measures continue throughout the design-build and construction process. The Permit also requires strict adherence to the "Best Management Practices for Working in Wetlands and Waterways" in Special Condition No. 3. (see Application dated March 2, 2018, Avoidance and Minimization of Impacts Memo and Permit dated October 10, 2018, in file). The Department has

determined that the applicant has and will continue to minimize impacts to nontidal wetlands and waterways to the extent practicable.

WATER QUALITY

Erosion and sediment control measures and stormwater management practices are designed to prevent the degradation of ground and surface water quality. Sediment pollution is addressed under Maryland's Erosion and Sediment Control Act. The law mandates local Soil Conservation Districts to review and approve erosion and sediment control plans developed in accordance with State standards. The Department's programmatic responsibilities are limited to promulgating regulations, and developing standards, ordinances, and other criteria necessary to administer an erosion and sediment control program, including program oversight and delegation of enforcement authority to local governments. As a result, Maryland Department of the Environment is responsible for the review and approval of an erosion and sediment control plan for the proposed project.

Stormwater discharges are addressed under Maryland's Stormwater Management Act. The law requires counties and municipalities to "adopt ordinances necessary to implement a stormwater management program." The Department's programmatic responsibilities are limited to promulgating regulations defining the minimum features of a stormwater ordinance and program oversight. The Department also reviews the stormwater management program of the counties and municipalities and their field implementation and requires corrective action where a program is found deficient. For most projects, compliance with the County-issued stormwater management approval ensures that the project will not degrade water quality, but for projects affecting Tier II waters, the Department will require a separate anti-degradation analysis. In this particular case, however, the Department is responsible for the review and approval of the project's stormwater management plan.

Stormwater Management for the project will be provided in accordance with the Maryland Stormwater Management and Erosion & Sediment Control Guidelines for State and Federal Projects, February 2015 and the 2000 Maryland Stormwater Design Manual, with revisions based on the Stormwater Management Act of 2007 requiring ESD to the Maximum Extent Practicable (MEP). At a minimum, water quality management will be required for 1-inch of rainfall over 100-percent of the proposed new impervious area and 50-percent of the proposed reconstructed impervious area. Runoff will be treating using MDE approved ESD practices including, but not limited to, bio-swales, grass channels, micro-bioretenion, rain gardens, and submerged gravel wetlands, which includes treatment of runoff and additional de-icing materials needed for the increased number of travel lanes. In addition, full ESD volume (ESDv) will be provided to the MEP. The ESD standard is met when the post-development hydrology is restored to natural hydrologic conditions assuring channel stability is maintained, pre-development groundwater hydrology is replicated, and nonpoint source pollution is minimized for the 1-year 24 hours frequency storm event. This requires capturing and treating from 1-inch to 2.6 inches of rainfall depending on the site conditions. Where practicable the ESD practices will be sized to manage the required ESDv. As needed, structural practices, including detention ponds and underground detention facilities, will be designed to provide Channel Protection volume (CPv) where the full ESDv cannot be provided in the ESD practices. Cpv is 12- or 24- hour extended detention of the post-developed 1-year, 24 hour storm event (See email from MDTA Project Manager dated July 16, 2018, in file).

During the application review process, the Department verifies that appropriate Best Management Practices are incorporated into the Sediment and Erosion Control Plans and the Stormwater Management Plans as listed above to protect the State's water resources. The Applicant proposes to incorporate appropriate Best Management Practices during construction to meet State water quality standards. The Applicant's plans will include a detailed sequence of construction with staged erosion and sediment

control measures and construction work. Special Conditions Nos. 4-8 and 10 have been included in the Permit to require MDTA to submit all plans for Department review and approval prior to construction in regulated resources (see Permit dated October 10, 2018, in file).

Streams adjacent to this project and its mitigation sites are designated as Use I (Carsins Run and tributary to Northeast Creek), Use I-P (Winters Run and its tributaries), Use III (Little Gunpowder Falls and its tributaries) and Use IV (Gunpowder Falls and its tributaries). Maryland Department of Natural Resources (DNR) Environmental Review Program reviewed this project and stated that Gunpowder Falls, Little Gunpowder Falls, Winters Run, and tributaries to Northeast Creek support anadromous fish species, including Yellow Perch. No in-stream work is permitted during the period of March 1 to June 15 in Use I streams; February 15 through June 15 in Use I and I-P streams with the presence of Yellow Perch; October 1 through June 15 in Use III streams with the presence of Yellow Perch; and February 15 through June 15 in Use IV streams with the presence of Yellow Perch, inclusive, during any year. The design plans will be reviewed by the Department prior to construction of the culvert extensions and/or replacement, bridge widenings, and stream relocation and/or restoration, and in accordance with COMAR 26.17.04 (Construction on Nontidal Waters and Floodplains). Hydrology and Hydraulic reports for the project shall be submitted to the Department for approval prior to any bridge widening, culvert extension or replacement, and/or stream relocation and restoration in-stream construction as required by Special Condition Nos. 7 and 8 of the Permit (see DNR Environmental Review Program Letters dated September 13, 2017 and March 2, 2018, Application dated March 2, 2018, and Permit dated October 10, 2018 in file).

During the hearing, it was noted that the streams were difficult to locate on the project plans. The Applicant added labels and overview maps to aid in locating the USGS named stream resources. Concerns regarding flooding near a proposed noise wall were also received, and any noise walls within the 100-year floodplain will be reviewed by the Department. Under COMAR 26.17.04.11.B(6), proposed projects which increase the risk of flooding to other property owners are prohibited, unless there is property owner sign-off, purchase of the affected area, placement of the area in a designated flood easement, or the issue is addressed by other means acceptable to the Department (see Permit dated October 10, 2018, in file, and COMAR 26.17.04.11.B(6)).

Tier II Antidegradation Review

Maryland is required by the Clean Water Act to develop policies, guidance, and implementation procedures to protect and maintain existing high quality waters such as Tier II waters and prevent degradations of existing water quality conditions. Tier II waters have chemical or biological characteristics that are significantly better than the minimum water quality requirements. All Tier II designations in Maryland are based on having healthy biological communities of fish and aquatic insects. Enhanced erosion and sediment control measures are required along the Tier II corridor in order to meet the State's antidegradation policy and to protect and maintain existing high quality waters.

A portion of the project from MD 152 to MD 24 is located within the Otter Point Creek 1 Tier II Catchment. This catchment has been determined to have No Remaining Assimilative Capacity and any impacts to the catchment require antidegradation review by the Department. MDTA is required to incorporate best management practices for working in Tier II catchments into their erosion and sediment/stormwater designs to the maximum extent possible per the Department's direction. Additionally, the Applicant is required to replant trees within the same Tier II catchment. The Applicant has identified onsite locations for replanting and is working with Harford County to find locations to plant the remaining trees within the Tier II watershed. Special condition 2 has been added to the Permit regarding these requirements (see Permit dated October 10, 2018, and Harford County Director of

Planning and Zoning letter dated September 17, 2018, in file). The Department has determined that the project is consistent with State water quality requirements.

ENDANGERED SPECIES

Once the application is received, it goes through a screening process. This screening process uses Geographical Information System (GIS) to determine the proposed site location and whether or not there are designated resources in the area such as rare, threatened or endangered species. If there are resources identified, the Division sends copies of the proposed plan to the appropriate agencies to review and send comments.

The GIS screening identified rare, threatened or endangered species within the project area (see Application dated March 2, 2018, in file). The United States Fish and Wildlife Service (USFWS) determined there were no federal records for rare, threatened, or endangered species exist within the vicinity of the Stage 1 of I-95 Section 200 project. DNR Wildlife and Heritage Service determined there were no state or federal records for listed plant or animal species within the Stage 1 of I-95 Section 200 project area. After further review of the proposed project and an expansion of the limits of disturbance (LOD) due to a bridge widening, DNR Wildlife and Heritage Service determined that a state-listed rare species (Ostrich Fern, *Matteuccia struthiopteris*) and a state-listed highly rare species (Flat-Spiked Sedge, *Carex planispicata*) have been documented in the area of the Gunpowder Falls crossing, and that a survey should be conducted if bridge work is proposed in this location. The Department provided comments to MDTA along with DNR's concerns on April 12, 2018 and received comment responses on May 25, 2018. DNR provided additional comments to MDTA's responses on July 16, 2018, including requesting a survey be conducted for the two rare species identified, and additional details regarding the bridge work over Gunpowder and Little Gunpowder Falls. MDTA responded to DNR's additional comments on August 15, 2018, and DNR approved the results of the RTE survey that found no supporting habitat, individuals, or populations of the two rare species, and therefore no potential impact to the species (see MDNR WHS Letters dated August 22, 2017 and email dated July 11, 2018, Comment Response Letter dated May 25, 2018, DNR Rare, Threatened or Endangered Survey Approval dated August 21, 2018, and USFWS Online Certification Letters dated February 5, 2018 in file).

On March 9, 2018, DNR Wildlife and Heritage Service determined there are records for the state-listed threatened Logperch (*Percina bimaculata*) occurring downstream of the Carsin's Run Stream Restoration mitigation site in Swan Creek. DNR Wildlife and Heritage Service encouraged the Applicant to adhere strictly to all appropriate best management practices for sediment and erosion control during all work at this site to reduce the likelihood of adverse impacts to this and other aquatic species. The USFWS determined no federal records for rare, threatened, or endangered species exist within the vicinity of the Carsin's Run Stream Restoration mitigation site (see DNR Wildlife and Heritage Service letter dated March 9, 2018 and email dated March 26, 2018, and USFWS Online Certification Letter dated February 7, 2018, in file).

On March 14, 2018, DNR Wildlife and Heritage Service determined there are no State or federal records for listed plant or animal species within the vicinity of the MD 7 Fish Passage Restoration mitigation site. The USFWS determined the threatened Bog Turtle (*Clemmys muhlenbergii*) may exist within the vicinity of the MD 7 Fish Passage Restoration mitigation site. On March 20, 2018, the USFWS stated the proposed project is not likely to adversely affect the Bog Turtle and no further coordination is required (see DNR Wildlife and Heritage Service Letter dated March 14, 2018, USFWS Species List dated February 20, 2018 and USFWS Letter dated March 20, 2018 in file).

HISTORIC PRESERVATION

The application was also screened using GIS for historical and archeological resources. The GIS screening identified potential historic properties within the project area (see Application dated March 2, 2018, in file). On July 25, 2017, MDTA notified the Maryland Historic Trust (MHT) that the project may have an effect on historic properties. Several historic properties were identified from the National Register of Historic Places and the Maryland Inventory of Historic Properties. On August 22, 2017, MHT determined no historic properties will be affected by the project (see Application dated March 2, 2018 and MHT coordination dated July 25, 2017 and August 22, 2017, in file).

On February 8, 2018, MDTA notified MHT of the Carsin's Run Stream Restoration mitigation project and MHT determined that no historic properties will be affected by the undertaking on March 8, 2018. On February 23, 2018, MDTA notified MHT of the MD 7 Fish Passage Restoration mitigation project and MHT determined that no historic properties will be affected by the undertaking on March 8, 2018 (see MHT coordination dated February 8 and 23 and March 8, 2018, in file).

Concerns were provided to the Department from an Interested Person regarding their home, the Onion-RAWL House, which is registered as a Maryland Historic Landmark. MDTA plans to continue to coordinate with the property owner, review the State of Maryland Noise Policy, and to discuss reforestation with the property owner as a means to minimize potential visual impacts to the historic property (see August 17, 2018 Comment Responses, in file).

MITIGATION

Mitigation is only a consideration in a permit decision after steps have been taken to avoid and minimize impacts to nontidal wetlands and their regulated buffers, and nontidal waterways, including the 100-year floodplain. The Permittee is required to mitigate for the loss of 21,353 square feet of forested nontidal wetland, 728 square feet of scrub-shrub nontidal wetland and 6,396 square feet of emergent nontidal wetland for impacts from the highway project by creating the equivalent of at least 42,706 square feet of forested nontidal wetland, 1,456 square feet of scrub-shrub nontidal wetland and 6,396 square feet of emergent nontidal wetland. Additionally, the Permittee is required to mitigate for the loss of 4,005 linear feet of perennial and intermittent waterways. Permanent impacts to wetlands at the stream restoration sites will be replaced at each respective site (see Application dated March 2, 2018, Phase II Mitigation Plan dated September 2018, Permit dated October 10, 2018, and the Phase II Mitigation Approval Letter dated October 10, 2018, in file).

Wetland mitigation will occur at the Whitemarsh Run Wetland Mitigation Site. The Whitemarsh Run Wetland Mitigation Site was constructed in 2014 to compensate for impacts associated with the I-95 Section 100 project (05-NT-0357/200660011) and future build-outs within the I-95 corridor. The site is located adjacent to Route 40 between Reames Road and White Marsh Boulevard in Baltimore County. At the site, wetlands were preserved, enhanced, and created, including the construction of three vernal pools. The mitigation site created 340,737 square feet of wetland mitigation credit, which left a surplus of 190,188 square feet after mitigation requirements for the I-95 Section 100 project were accounted for. Of the surplus, 50,558 square feet of wetland mitigation credit will be utilized to fulfill the current Stage 1 of the I-95 Section 200 Improvements Project's wetland mitigation requirements (see Phase II Mitigation Plan dated September 2018, Phase II Mitigation Plan Approval Letter dated October 10, 2018, and Permit dated October 10, 2018, in file).

Stream mitigation for impacts to perennial and intermittent streams will occur in several locations, including the Carsin's Run Stream Restoration Mitigation Site, the MD 7 Fish Passage Restoration

Mitigation Site, and via onsite stream restoration of Waters of the U.S. (WUS) 18A and 32A. The Carsin's Run Stream Restoration Mitigation Site is located within the MDTA right-of-way just north of the I-95/MD 22 interchange and west of I-95 in Harford County. MDTA plans to restore 200 linear feet of perennial Carsin's Run and 650 linear feet of an intermittent tributary to Carsin's Run named Ripken Tributary for a total of 850 linear feet of stream credit. The MD 7 Fish Passage Stream Restoration Site is located adjacent to West Old Philadelphia Road approximately 2,000 feet southwest of the MD 7/Wells Camp Road intersection in Cecil County. MDTA plans to improve fish passage within the stream and through the existing four pipe culvert under MD 7 for a total of 3,084 linear feet of stream credit. WUS 18A is a perennial stream located within the MDTA right-of-way, just northwest of I-95 near mile marker 73.0 in Harford County. MDTA plans to restore erosive banks and a perched floodplain along WUS 18A for a total of 671 linear feet of stream credit. WUS 32A is an intermittent stream located within the MDTA right-of-way, just northwest of I-95 near mile marker 72.8 in Harford County. MDTA proposes to restore steep incised banks along this stream for a total of 187 linear feet of stream credit. Excess stream and wetland credit achieved at these mitigation sites may be applied towards future Section 200 build-outs if approved by the Department. MDTA will also consider improvements of additional degraded streams within the current project area as part of the Stage 2 permit application, and is willing to collaborate with the Department and adjacent property owners to determine the stream systems in need of improvement (see Application dated March 2, 2018, Phase II Mitigation Plan dated September 2018, Phase II Mitigation Approval Letter dated October 10, 2018 and MDTA email dated August 6, 2018, in file).

MDTA is responsible for monitoring and ensuring successful performance of the compensatory mitigation sites. Annual stream monitoring of the Carsin's Run Stream Restoration Mitigation Site, the MD 7 Fish Passage Restoration Mitigation Site, and the onsite stream restoration of WUS 18A and WUS 32A will be conducted for three out of five years, with Monitoring Reports submitted to the Department by December 31 of each year. Changes in channel cross-section, pattern and profile, bed materials, channel stability, structure stability and condition, and vegetation viability will be evaluated through the monitoring. Monitoring reports will contain the project overview and assessment; monitoring requirements and performance standards; summary of data collected during each monitoring visit including photos, vegetation success, soils and hydrology data; maps and plans showing data points, photo locations, and other pertinent features of the project site; and conclusions discussing the progress of the mitigation site, potential remediation measures, and whether performance standards are being met. The Whitemarsh Run Wetland Mitigation Site is currently under its second year of post-construction five year monitoring. Mitigation at this site is required to meet performance standards for created and enhanced wetland vegetation in years two, three and five; and for created wetland hydrology and hydric soils by the completion of the five-year monitoring period. Vernal pool and invasive species must also be met by the completion of the five-year monitoring period. Performance standards are outlined in the Whitemarsh Run Mitigation Site Monitoring Plan. Annual monitoring reports are required to be submitted to the Department by December 31 of each year, and will include performance of wetland vegetation in the created and enhanced wetland areas, development of hydrology and soils in the created wetland area, performance of constructed vernal pools, documentation of invasive species throughout the site, and documentation of problem areas identified with potential corrective remedial measures (see Whitemarsh Run Mitigation Site Monitoring Plan dated December 2014, Phase II Mitigation Plan dated September 2018, Phase II Mitigation Approval Letter dated October 10, 2018, and MDTA email dated August 6, 2018, in file).

MDTA will continue to monitor and manage each mitigation site until each has met performance standards and been deemed to be self-sustaining by the Department. MDTA is the responsible party for long-term management of each site. MDTA will implement adaptive management strategies if necessary by working with the Department to agree upon and implement corrective measures, which could include options such as invasive species management, and installation of monitoring devices to sure hydrology is

adequate. As a state agency, MDTA has been financially assured to construct Stage 1 of the I-95 Section 200 Improvements project, which includes compensatory mitigation construction and monitoring and long-term maintenance of each mitigation site (see Whitemarsh Run Mitigation Site Monitoring Plan dated December 2014, Phase II Mitigation Plan dated September 2018, Phase II Mitigation Approval Letter dated October 10, 2018 and MDTA email dated August 6, 2018, in file).

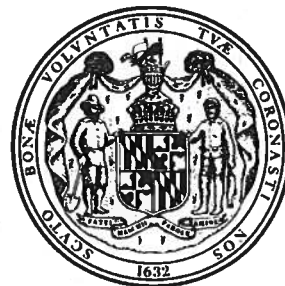
STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER AND SCIENCE ADMINISTRATION
NONTIDAL WETLANDS AND WATERWAYS PERMIT

PERMIT NUMBER: 18-NT-0086/201860368

EFFECTIVE DATE: October 10, 2018

EXPIRATION DATE: October 10, 2028

PERMITTEE: Maryland Transportation Authority
8019 Corporate Drive, Suite F
Baltimore, MD 21236
Attn: Mr. William Pines



IN ACCORDANCE WITH ENVIRONMENT ARTICLE §5-503(a) AND §5-906(b), ANNOTATED CODE OF MARYLAND (2007 REPLACEMENT VOLUME), COMAR 26.17.04 AND 26.23.01, AND 26.08.02 AND THE ATTACHED CONDITIONS, MARYLAND TRANSPORTATION AUTHORITY ("PERMITTEE"), IS HEREBY AUTHORIZED BY THE WATER AND SCIENCE ADMINISTRATION ("ADMINISTRATION") TO CONDUCT A REGULATED ACTIVITY IN A NONTIDAL WETLAND, BUFFER, OR EXPANDED BUFFER, AND/OR TO CHANGE THE COURSE, CURRENT OR CROSS-SECTION OF WATERS OF THE STATE, IN ACCORDANCE WITH THE ATTACHED PLANS APPROVED BY THE ADMINISTRATION ON OCTOBER 10, 2018 ("APPROVED PLAN") AND PREPARED MARYLAND TRANSPORTATION AUTHORITY AND INCORPORATED HEREIN, AS DESCRIBED BELOW:

Regulated activities are associated with Stage 1 of the I-95 Section 200 roadway improvements under MDTA Segment Nos. KH-3009, KH-3010, KH-3012, and KH-3014. The work includes adding a two-lane express toll lane (ETL) on northbound I-95 from MD 43 to MD 152; an auxiliary lane from MD 152 to MD 24; replacement of the Raphel Road Overpass, and the Old Joppa Road Overpass; reconstructing and widening the bridge decks on the Big Gunpowder, and Little Gunpowder bridges; construction of two noise walls; utility relocations; providing a new Intelligent Transportation System (ITS) communication system to improve operations and incident management along both northbound and southbound I-95; stream restoration at the Carsin's Run Stream Mitigation Site, MD 7 Fish Passage Mitigation Site, and onsite stream mitigation; and use of temporary erosion and sediment controls. This approval authorizes permanent impacts to 21,353 square feet of forested nontidal wetland, 728 square feet of scrub shrub nontidal wetland, 6,396 square feet of emergent nontidal wetland, 94,473 square feet of the 25-foot nontidal wetland buffer, 2,086 linear feet of perennial waterways, 3,608 linear feet of intermittent waterways, and 254,688 square feet of 100-year floodplain. Temporary impacts include 22,930 square feet of forested nontidal wetland, 10,534 square feet of emergent nontidal wetland, 44,688 square feet of the 25-foot nontidal wetland buffer, 446 linear feet of perennial waterways, and 26,655 square feet of 100-year floodplain. The project is located on I-95 from MD 43 to MD 24 in Baltimore and Harford Counties, with proposed mitigation sites in Baltimore, Harford, and Cecil Counties.

MD Grid Coordinates N 193570± E 450298±

Denise M. Keehner
Program Manager
Wetlands and Waterways Program

Attachments: Conditions of Permit
Best Management Practices
Impact Plates
Harford County Director of Planning and Zoning letter dated September 17, 2018

cc: MDE Compliance Program
Steve Elinsky, US Army Corps of Engineers

SPECIAL CONDITIONS

1. **Avoidance and minimization:** Avoidance and minimization of impacts to wetlands, wetland buffers, waters, and the regulated floodplain shall be emphasized throughout the remainder of the design and construction process.
2. **Tier II Watershed:** The project is located within the Otter Creek 1 Tier II Catchment. The following requirements and enhanced protection measures apply:
 - a. **Checklist Submittal:** Permittee shall update the Antidegradation Review Checklist for Enhanced Best Management Practices for Tier II Waters (Checklist) for submittal to the Department prior to the start of construction. Once approved by the Department, the Permittee, its employees, agents and contractors shall conduct authorized activities in a manner consistent with the agreed upon selection of Enhanced Best Management Practices for Tier II Waters.
 - b. **Avoidance and Minimization:** Permittee shall continue to avoid and minimize impacts to forest cover, riparian buffers, and make efforts to reduce impervious cover within the Tier II watershed to the extent practicable.
 - c. **Tier II Plantings:** Permittee shall replant 7.77 acres within the Otter Creek 1 Tier II Catchment, or as amended by the revised Checklist. The location of the plantings shall be onsite, or on Harford County owned property. The Permittee shall continue to work with Harford County on the location of the plantings as noted in the September 17, 2018 letter from the Harford County Director of Planning and Zoning. The Permittee shall submit the final location of the Tier II plantings to the Department within 60 days of finalizing the location and planting plan.
3. **Best Management Practices:** The provisions contained in the attached "Best Management Practices for Working in Wetlands and Waterways" listed on Page 7 are a part of this permit and shall be strictly enforced. The Permittee shall emphasize the sensitivity of the environmental resources along the transportation corridor and stress the importance of stringent adherence to all best management practices to its contractors during all pre-construction and progress meetings. These environmental resources include, but may not be limited to the sensitive species in the vicinity of the project site, including wetland resources surrounding the project, the Otter Creek 1 Tier II Catchment, and the presence of important anadromous fish species.
4. **Soil Borings Plans:** Soil borings plans in the vicinity of the Gunpowder Falls and Little Gunpowder Falls shall be submitted to the Administration for review and approval prior to the start of the soil boring work.
5. **Wetland and Waterway Impacts – Plan Submittal:** Permittee shall, prior to commencement of construction within each approved phase for each project segment, submit to the Administration for review and approval relevant design plans, including Erosion and Sediment Control Plans and Stormwater Management Plans approved by the Maryland Department of the Environment. The plans shall include the limits of any nontidal wetlands, wetland buffers, and waters of the State (including the 100-year floodplain), limits of disturbance, "Best Management Practices," and a sequence of construction. Submittals to the Waterway Construction Division will be in accordance with COMAR 26.17.04 and include a design report. In addition, plans should include methods for protection of water quality, maintenance of stream flow, and dewatering. The plans, after having been approved by the Administration, shall be forwarded to the Permittee to be incorporated as an attachment to this Permit before construction activities begin for each segment. The Permittee shall perform all work in accordance with approved Soil Erosion and Sediment Control and Stormwater Management Plans.
6. **Submittal Review:** No work within a regulated resource area shall begin without written approval of the above plan submittals by the Water and Science Administration Nontidal Wetlands and Waterway Construction Divisions (the "Divisions"). The Divisions will have up to 45 calendar days to review and respond to each submittal or response to comments. The Permittee shall develop a submittal schedule indicating anticipated dates for submission of plans and reports, and shall update the schedule as required. If the Administration is unable to return comments or approve within 14 days, the Administration will notify the Permittee and provide an estimate for when the comments or approval is expected. An avoidance and minimization narrative will also be required for each submittal review within resources.
7. **Stream Relocation Design** – Where perennial or intermittent streams must be relocated, a design report shall be submitted and approved prior to initiation of relocation activities. Design report shall include hydrologic and hydraulic analysis of existing and proposed conditions, details of geomorphic approach to stream stabilization, proposed plantings, and maintenance of streamflow. Stream relocations shall utilize natural channel design techniques to the extent practical, and include provision for maximizing water quality and reduce thermal impacts.
8. **Hydrology and Hydraulics Submittal:** Hydrology and Hydraulics Analysis Reports shall be submitted to the Administration for approval prior to construction for work proposed in streams and 100-year floodplains; specifically for any bridge widening, culvert extension or replacement, noise wall installation, stream relocation/restoration and/or in-stream construction, and other relevant submittals within these resources. Hydrology and Hydraulics Analysis reports for each of these locations shall be submitted to the Administration for approval prior to construction of each location. Reevaluation of previously approved hydraulics may be required if determined necessary by the Administration, for any changes to upstream and downstream grading, pipe slopes, and elevations that may occur during the design process. Designs will be reviewed for compliance with all requirements of applicable state regulations.
9. **Bridge Extensions:** Bridge extensions will be constructed over Big Gunpowder Falls (northbound out-to-out width of 75.35 feet) and Little Gunpowder Falls (northbound out-to-out width of 76.44 feet). A maximum of one pier shall be built within Big Gunpowder Falls in-line with the existing piers. No piers shall be constructed within Little Gunpowder Falls.

10. **Culvert Design:** Culverts conveying the stream base flow shall be depressed a minimum of one foot below the invert of the stream so that a natural substrate will accumulate in the culvert. Culverts smaller than 24 inches in diameter can be depressed less than one foot if specifically waived by the Administration. The Permittee shall design culverts to address specific geomorphic characteristics of the stream to avoid downstream scour and channel degradation, and to maintain ecological functions such as aquatic habitat, flood attenuation, sediment transport, and stream channel stability. Culvert length shall be minimized to the greatest extent practicable.
11. **Passage of Aquatic Life:** Provisions for passage of aquatic life will be a strong consideration during the review of waterways crossing design. Adequate sizing of structures in order to reduce velocities, promote natural substrate development, and allow adequate depression to accommodate future stream conditions shall be considered. Rip-rap within streams shall have a depressed "low flow" channel or other feature to allow passage. Where appropriate and practicable, structures greater than 150 linear feet will incorporate provisions to promote passage of those species known to occur in the waterway. Culverts greater than 150 in length will require an environmental study to demonstrate that adverse impacts are adequately mitigated unless waived by the Administration (COMAR 26.17.04.06). Where existing culverts are being extended, appropriate measures to promote / restore passage of aquatic life, including a "low flow" channel, may be required. The Administration shall approve the final plans for the structures prior to the start of their construction. If fish passage is not possible at a culvert crossing, additional mitigation may be required by the Administration.
12. **Preconstruction Meetings:** The Divisions shall be invited to attend a scheduled pre-construction meeting for each contract involving wetland / waters impacts. This meeting should include representatives of MDE's Compliance Program, the Permittee, contractor, and any subcontractors doing work in the area of regulated wetland and waters resources. The Divisions shall be notified of this meeting a minimum of 14 days prior to the date of the meeting. This meeting may be in conjunction with a partnering activity or other regulatory agency meeting.
13. **Associated Impacts:** Impacts to nontidal wetlands, nontidal wetland buffers, and nontidal waters (including the 100-year floodplain), both permanent and temporary, resulting from activities associated with this project, including utility relocation; disposal of materials; access; temporary storage facilities; or other related activities, are subject to all conditions of this Permit, including review and approval of submittals prior to initiation of work within regulated resources.
14. **Restoration of Temporary Impacts:** All streams and wetlands temporarily impacted by the work shall be restored to their pre-existing contours and elevations following construction. Wetlands shall be replanted with a mix of native (non-invasive) vegetation similar to the species composition that existed prior to construction; wetland hydrology shall be maintained; and the Permittee shall ensure wetland functions are the same as they were prior to the disturbance. Any pre-existing riparian vegetation that is grubbed within 30-feet of a stream shall be replanted with native (non-invasive) vegetation similar to the species composition that existed prior to construction. Permittee shall submit a final impact accounting report two growing seasons after restoration of all temporary impacts has been completed. Following the submittal of the final impact accounting report, a project inspection shall be conducted to verify the successful restoration of any temporarily impacted wetlands and streams. If restoration efforts are determined to have failed, further remediation, mitigation and / or monitoring will be required by the Administration.
15. **Temporary Impacts to Streams:** Proposed temporary stream crossings for construction access to be in place for less than one year shall be designed to pass the two-year storm event. All temporary crossings shall be designed to remain stable in case of overtopping. If construction constraints make these requirements impractical, the plan submittal shall include detailed information showing the provisions to prevent degradation to water quality during periods of overtopping, including provisions to secure all devices to prevent movement downstream. Proposed maintenance of streamflow for construction activities shall be submitted to the Administration for approval, and will require a design report indicating the flows to be handled, and provisions for when flows exceed capacity. In no case may a temporary stream crossing or maintenance of streamflow technique result in an increased risk of flooding to adjacent property owners without their written consent. Plan submittals for temporary stream impacts should include detailed plans for restoration, stabilization, and landscaping of the channel and floodplain area.
16. **Changes to approved impacts:** Should final design result in necessary impacts to any wetland or waterway greater than those approved in this permit, an approved Nontidal Wetlands and Waterway Permit Modification shall be required prior to initiation of work in these areas. At the Administration's discretion, minor increases may be initially approved by letter with subsequent Permit Modification reconciling impact totals. Should unplanned impacts occur (such as resulting from a failure of sediment and erosion control, or equipment exceeding the limits of disturbance), the affected area shall be restored to their pre-existing contours and elevations, and replanted with native vegetative species similar to the composition which existed prior to disturbance. The restored wetland areas shall be approved by the Divisions and additional mitigation may be required.
17. **Record Keeping:** The Permittee shall develop and maintain a tracking report to monitor impacts to regulated environmental resources. This environmental monitoring report shall include a detailed depiction of each wetland and waterway authorized to be impacted, any changes to impacts in final design, and a continuing and cumulative total of as-built impacts. Electronic files shall also be submitted to verify impact calculation totals. The report will also document compliance with Sediment and Erosion Control provisions, and present any compliance issues and their resolution. The tracking report shall be submitted to the Divisions quarterly, or at key project milestones, at the discretion of the Divisions.

18. **Stream Mitigation Site Monitoring:** Permittee shall monitor the stream restoration project for a period of three (3) out of five (5) years following the completion of construction of the project. The monitoring shall identify and evaluate changes in: 1) channel cross-section, pattern and profile; 2) bed materials; 3) channel stability; 4) structure stability and condition; and, 5) vegetation viability. The monitoring effort shall include topographic surveys of monumented cross-sections within the realigned channel segment, visual field observations, photographic documentation, vegetation viability measurements, and identify any necessary corrective measures. Permittee shall submit reports on years one, three, and five on the results of the monitoring efforts at the stream restoration project to the Administration by December 31 of each year. Permittee shall coordinate with the regulatory agencies concerning applicable remedial measures for any identified project failures and shall correct any project failures within one year of their identification. All proposed remedial measures must be reviewed and approved prior to implementation. In the event of discrepancy with the stream monitoring requirements found in this Condition, the standards and requirements set forth in the Phase II Approval Letter ("Approval Letter"), the Approval Letter shall govern.

GENERAL CONDITIONS

1. **Validity:** Permit is valid only for use by Permittee. Permit may be transferred only with prior written approval of the Administration. In the event of transfer, transferee agrees to comply with all terms and conditions of Permit.
2. **Initiation of Work, Modifications and Extension of Term:** Permittee shall initiate authorized activities in waterways, including streams and the 100-year floodplain, within two (2) years of the Effective Date of this Permit or the Permit shall expire. [Annotated Code of Maryland, Environment Article 5-510(a)-(b) and Code of Maryland Regulations 26.17.04.12]. Permittee may submit written requests to the Administration for (a) extension of the period for initiation of work, (b) modification of Permit, including the Approved Plan, or, (c) not later than 45 days prior to Expiration Date, an extension of term. Requests for modification shall be in accordance with applicable regulations and shall state reasons for changes, and shall indicate the impacts on nontidal wetlands, streams, and the floodplain, as applicable. The Administration may grant a request at its sole discretion. (Annotated Code of Maryland, Environment Article 5-510(c), and Code of Maryland Regulations 26.17.04.12, and Annotated Code of Maryland, Environment Article 5-907 and Code of Maryland Regulations 26.23.02.07).
3. **Responsibility and Compliance:** Permittee is fully responsible for all work performed and activities authorized by this Permit shall be performed in compliance with this Permit and Approved Plan. Permittee agrees that a copy of the Permit and Approved Plan shall be kept at the construction site and provided to its employees, agents and contractors. A person (including Permittee, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of this Permit, Approved Plan or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Department of the Environment Article, Annotated Code of Maryland (2007 Replacement Volume).
4. **Failure to Comply:** If Permittee, its employees, agents or contractors fail to comply with this Permit or Approved Plan, the Administration may, in its discretion, issue an administrative order requiring Permittee, its employees, agents and contractors to cease and desist any activities which violate this Permit, or the Administration may take any other enforcement action available to it by law, including filing civil or criminal charges.
5. **Suspension or Revocation:** Permit may be suspended or revoked by the Administration, after notice of opportunity for a hearing, if Permittee: (a) submits false or inaccurate information in Permit application or subsequently required submittals; (b) deviates from the Approved Plan, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of this Permit; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Department of the Environment Article, Annotated Code of Maryland as amended; (e) fails to allow authorized representatives of the Administration to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (f) fails to comply with the requirements of an administrative action or order issued by the Administration; or (g) does not have vested rights under this Permit and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or suspension.
6. **Other Approvals:** Permit does not authorize any injury to private property, any invasion of rights, or any infringement of federal, State or local laws or regulations, nor does it obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
7. **Site Access:** Permittee shall allow authorized representatives of the Administration access to the site of authorized activities during normal business hours to conduct inspections and evaluations necessary to assure compliance with this Authorization. Permittee shall provide necessary assistance to effectively and safely conduct such inspections and evaluations.
8. **Inspection Notification:** Permittee shall notify the Administration's Compliance Program at least five (5) days before starting authorized activities and five (5) days after completion. For Allegany, Garrett, and Washington Counties, Permittee shall call 301-689-1480. For Carroll, Frederick, Howard, Montgomery and Prince George's Counties, Permittee shall call 301-665-2850. For Baltimore City, Anne Arundel, Baltimore, Calvert, Charles, and St. Mary's Counties, Permittee shall call 410-537-3510. For Caroline, Cecil, Dorchester, Harford, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester Counties, Permittee shall call 410-901-4020. If Permit is for a project that is part of a mining site, please contact the Land and Materials Administration's Mining Program at 410-537-3557 at least five (5) days before starting authorized activities and five (5) days after completion.

9. **Sediment Control:** Permittee shall obtain approval from the Maryland Department of the Environment for a grading and sediment control plan specifying soil erosion control measures. The approved grading and sediment control plan shall be included in the Approved Plan, and shall be available at the construction site.
10. **Best Management Practices During Construction:** Permittee, its employees, agents and contractors shall conduct authorized activities in a manner consistent with the Best Management Practices specified by the Administration.
11. **Disposal of Excess:** Unless otherwise shown on the Approved Plan, all excess fill, spoil material, debris, and construction material shall be disposed of outside of nontidal wetlands, nontidal wetlands buffers, and the 100-year floodplain, and in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands.
12. **Temporary Staging Areas:** Temporary construction trailers or structures, staging areas and stockpiles shall not be located within nontidal wetlands, nontidal wetlands buffers, or the 100-year floodplain unless specifically included on the Approved Plan.
13. **Temporary Stream Access Crossings:** Temporary stream access crossings shall not be constructed or utilized unless shown on the Approved Plan. If temporary stream access crossings are determined necessary prior to initiation of work or at any time during construction, Permittee, its employees, agents or contractors shall submit a written request to the Administration and secure the necessary permits or approvals for such crossings before installation of the crossings. Temporary stream access crossings shall be removed and the disturbance stabilized prior to completion of authorized activity or within one (1) year of installation.
14. **Discharge:** Runoff or accumulated water containing sediment or other suspended materials shall not be discharged into waters of the State unless treated by an approved sediment control device or structure.
15. **Instream Construction Prohibition:** To protect important aquatic species, motor driven construction equipment shall not be allowed within stream channels unless on authorized ford crossings. Activities within stream channels are prohibited as determined by the classification of the stream (COMAR 26.08.02.08): Carsins Run is a Use I waterway, in-stream work may not be conducted from March 1 through June 15, inclusive, during any year; Winters Run and its tributaries and Tributary to Northeast Creek are Use I and I-P waterways, respectively, with the presence of Yellow Perch, in-stream work may not be conducted from February 15 through June 15, inclusive, during any year; Little Gunpowder Falls and its tributaries are Use III waterways with the presence of Yellow Perch, in-stream work may not be conducted from October 1 through June 15, inclusive, during any year; Gunpowder Falls and its tributaries are Use IV waterways with the presence of Yellow Perch, in-stream work may not be conducted from February 15 through June 15, inclusive, during any year.
16. **Instream Blasting:** Permittee shall obtain prior written approval from the Administration before blasting or using explosives in the stream channel.
17. **Minimum Disturbance:** Any disturbance of stream banks, channel bottom, wetlands, and wetlands buffer authorized by Permit or Approved Plan shall be the minimum necessary to conduct permitted activities. All disturbed areas shall be stabilized vegetatively no later than seven (7) days after construction is completed or in accordance with the approved grading or sediment and erosion control plan.
18. **Restoration of Construction Site:** Permittee shall restore the construction site upon completion of authorized activities. Undercutting, meandering or degradation of the stream banks or channel bottom, any deposition of sediment or other materials, and any alteration of wetland vegetation, soils, or hydrology, resulting directly or indirectly from construction or authorized activities, shall be corrected by Permittee as directed by the Administration.
19. **Mitigation:** Permittee shall mitigate for the loss of 21,353 square feet of forested nontidal wetland, 728 square feet of scrub-shrub nontidal wetland, 6,396 square feet of emergent nontidal wetland, and 4,005 linear feet of perennial and intermittent streams by creating the equivalent of at least 42,706 square feet of forested nontidal wetland, 1,456 square feet of scrub-shrub nontidal wetland, 6,396 square feet of emergent nontidal wetland, and restoring 4,005 linear feet of perennial and intermittent streams, in accordance with an approved Phase I conceptual mitigation plan, as may be modified by a Phase II Mitigation Plan approved by the Mitigation and Technical Assistance Section ("Section") of the Department, pursuant to COMAR 26.23.04. Permanent wetland impacts from the stream restoration sites will be replaced at a 1:1 ratio at the respective restoration sites. The White Marsh Wetland Mitigation Site is located adjacent to Route 40 between Reames Road and White Marsh Boulevard in Baltimore County. The Carsin's Run Stream Restoration Mitigation Site is located within the MDTA right-of-way just north of the I-95/MD 22 interchange and west of I-95 in Harford County. The MD 7 Fish Passage Stream Restoration Site is located adjacent to West Old Philadelphia Road approximately 2,000 feet southwest of the MD 7/Wells Camp Road intersection in Cecil County. Onsite stream restoration of WUS 18A is located with the MDTA right-of-way, just northwest of I-95 near mile marker 73.0 in Harford County. The Permittee shall successfully construct the mitigation site and meet project standards and other requirements, as specified in the Approval Letter and COMAR 26.23.04, in advance or concurrently with the activities authorized in this Permit. In the event of discrepancy with the mitigation requirements found in this Condition, the standards and requirements set forth in Approval Letter shall govern. The Permittee is required to notify the Section upon the start of grading and the completion of planting of the mitigation project. The Permittee shall submit monitoring reports for the mitigation project to the Section as specified in the Approval Letter. If the Permittee as stated in the Permit, changes, the Permittee must notify the Section. If the mitigation obligation is to be transferred to another party, the Permittee must notify the Section.

FEDERALLY MANDATED STATE AUTHORIZATIONS

Water Quality Certification is granted for this project provided that all work is performed in accordance with the authorized project description and associated conditions. See individual WQC for 18-NT-0086/201860368. In addition, as applicable, this Permit constitutes that State's concurrence with the Applicant's certification that the activities authorized herein are consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. Activities in the following counties are not subject to the Maryland Coastal Zone Management requirement: Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington.

U.S. ARMY CORPS OF ENGINEERS AUTHORIZATION

The U.S. Army Corps of Engineers (Corps) has reviewed this activity and will issue an Individual Permit. Information regarding the terms and conditions of the Permit will be sent directly to the applicant by the Corps.

**BEST MANAGEMENT PRACTICES FOR WORKING IN
NONTIDAL WETLANDS, WETLAND BUFFERS,
WATERWAYS, AND 100-YEAR FLOODPLAINS**

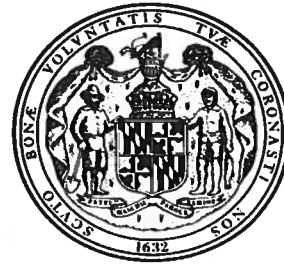
- 1) No excess fill, construction material, or debris shall be stockpiled or stored in nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 2) Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 3) Do not use the excavated material as backfill if it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. If additional backfill is required, use clean material free of waste metal products, unsightly debris, toxic material, or any other deleterious substance.
- 4) Place heavy equipment on mats or suitably operate the equipment to prevent damage to nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 5) Repair and maintain any serviceable structure or fill so there is no permanent loss of nontidal wetlands, nontidal wetland buffers, or waterways, or permanent modification of the 100-year floodplain in excess of that lost under the originally authorized structure or fill.
- 6) Rectify any nontidal wetlands, wetland buffers, waterways, or 100-year floodplain temporarily impacted by any construction.
- 7) All stabilization in the nontidal wetland and nontidal wetland buffer shall consist of the following species: Annual Ryegrass (Lolium multiflorum), Millet (Setaria italica), Barley (Hordeum sp.), Oats (Uniola sp.), and/or Rye (Secale cereale). These species will allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other non-persistent vegetation may be acceptable, but must be approved by the Nontidal Wetlands and Waterways Division. **Kentucky 31 fescue shall not be utilized in wetland or buffer areas.** The area should be seeded and mulched to reduce erosion after construction activities have been completed.
- 8) After installation has been completed, make post-construction grades and elevations the same as the original grades and elevations in temporarily impacted areas.
- 9) To protect aquatic species, in-stream work is prohibited as determined by the classification of the stream:
 - Use I waters: In-stream work shall not be conducted during the period March 1 through June 15, inclusive, during any year.
 - Use I and I-P waters with the presence of Yellow Perch: In-stream work shall not be conducted during the period February 15 through June 15, inclusive, during any year.
 - Use III waters with the presence of Yellow Perch: In-stream work shall not be conducted during the period October 1 through June 15, inclusive, during any year.
 - Use IV waters with the presence of Yellow Perch: In-stream work shall not be conducted during the period February 15 through June 15, inclusive, during any year.
- 10) Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway.
- 11) Culverts shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species, unless the purpose of the activity is to impound water.

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

WATER QUALITY CERTIFICATION
for
NONTIDAL WETLANDS AND WATERWAYS

CERTIFICATION NUMBER: 18-NT-0086 / 201860368

ISSUED TO: Maryland Transportation Authority
8019 Corporate Drive, Suite F
Baltimore, MD 21236
Attn: Mr. William Pines



EFFECTIVE DATE: October 10, 2018

EXPIRATION DATE: October 10, 2028

Description of Certified Project: Regulated activities are associated with Stage 1 of the I-95 Section 200 roadway improvements under MDTA Segment Nos. KH-3009, KH-3010, KH-3012, and KH-3014. The work includes adding a two-lane express toll lane (ETL) on northbound I-95 from MD 43 to MD 152; an auxiliary lane from MD 152 to MD 24; replacement of the Raphel Road Overpass, and the Old Joppa Road Overpass; reconstructing and widening the bridge decks on the Big Gunpowder, and Little Gunpowder bridges; construction of two noise walls; utility relocations; providing a new Intelligent Transportation System (ITS) communication system to improve operations and incident management along both northbound and southbound I-95; stream restoration at the Carsin's Run Stream Mitigation Site, MD 7 Fish Passage Mitigation Site, and onsite stream mitigation; and use of temporary erosion and sediment controls. This approval authorizes permanent impacts to 21,353 square feet of forested nontidal wetland, 728 square feet of scrub shrub nontidal wetland, 6,396 square feet of emergent nontidal wetland, 94,473 square feet of the 25-foot nontidal wetland buffer, 2,086 linear feet of perennial waterways, 3,608 linear feet of intermittent waterways, 3,103 linear feet of ephemeral waterways, and 254,688 square feet of 100-year floodplain. Temporary impacts include 22,930 square feet of forested nontidal wetland, 10,534 square feet of emergent nontidal wetland, 44,688 square feet of the 25-foot nontidal wetland buffer, 446 linear feet of perennial waterways, and 26,655 square feet of 100-year floodplain. The project is located on I-95 from MD 43 to MD 24 in Baltimore and Harford Counties, with proposed mitigation sites in Baltimore, Harford, and Cecil Counties.

This Water Quality Certification is issued under authority of Section 401 of the Federal Water Pollution Control Act and its Amendments and the Environment Article, Sections 9-313 - 9-323, inclusive, Annotated Code of Maryland. A copy of this required Certification has been sent to the Corps of Engineers. This Certification does not relieve the applicant of responsibility for obtaining any other approvals, licenses or permits in accordance with federal, State, or local requirements and does not authorize commencement of the proposed project. The Maryland Department of the Environment has determined from a review of the plans that the project described above will not violate Maryland's water quality standards, provided that the following conditions are satisfied.

The Certification Holder shall comply with the following conditions:

GENERAL CONDITIONS

1. X The proposed project shall be constructed in a manner which will not violate Maryland's Water Quality Standards as set forth in COMAR 26.08.02. The applicant is to notify the Administration's Compliance Program, at 410-537-3510, ten (10) days prior to commencing work.
2. X The proposed project shall be constructed in accordance with the approved final plan and its revisions.
3. X All fill and construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into waters of this State.
4. X The Certification Holder shall notify the Water Management Administration, Nontidal Wetlands and Waterways Division, in writing, upon transferring property ownership or responsibility for compliance with these conditions to another person. The new owner/operator shall request, in writing, transfer of this water quality certification to his/her name.
5. X The Certification Holder shall allow the Water and Science Administration or its representative to inspect the project area at reasonable times and to inspect records regarding this project.

SPECIAL CONDITIONS

1. The conditions of Nontidal Wetlands and Waterways Permit No. 18-NT-0086/201860368 incorporated, by reference, into this Water Quality Certification.
2. X The disturbance of the bottom of the water and sediment transport into adjacent State waters shall be minimized. The Permittee shall obtain and certify compliance with a grading and sediment control plan, which has been approved by the, Maryland Department of the Environment. The approved plans shall be available at the project site during all phases of construction.
3. X Work in Carsins Run may not be conducted from March 1 through June 15 inclusive, of any year. Work in Winters Run and its tributaries and Tributary to Northeast Creek may not be conducted from February 15 through June 15 inclusive, during any year. Work in Little Gunpowder Falls and its tributaries may not be conducted from October 1 through June 15 inclusive, during any year. Work within Gunpowder Falls and its tributaries may not be conducted from February 15 through June 15 inclusive, during any year.
4. X Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway. The natural vegetation shall be maintained and restored when disturbed or eroded. Stormwater drainage facilities shall be designed, implemented, operated, and maintained in accordance with the applicable approving authority.
5. X Stormwater Management Plan: The certification holder shall provide to the Administration a stormwater management plan including cross sections, and other applicable drawings which incorporates effective pollutant removal strategies in uplands to treat the required volume of runoff from impervious surfaces prior to the release of stormwater into state waters, tidal wetlands, or nontidal wetlands. There shall be no discharge of untreated stormwater to State waters and tidal and nontidal wetlands. The plan shall be provided by Maryland Transportation Authority and shall be implemented by Maryland Transportation Authority.
6. X Nontidal Wetland/Waters Mitigation Requirement: Permittee shall mitigate for the loss of 21,353 square feet of forested nontidal wetland, 728 square feet of scrub-shrub nontidal wetland, 6,396 square feet

of emergent nontidal wetland, and 4,005 linear feet of perennial and intermittent streams by creating the equivalent of at least 42,706 square feet of forested nontidal wetland, 1,456 square feet of scrub-shrub nontidal wetland, 6,396 square feet of emergent nontidal wetland, and restoring 4,005 linear feet of perennial and intermittent streams, in accordance with an approved Phase I conceptual mitigation plan, as may be modified by a Phase II Mitigation Plan approved by the Mitigation and Technical Assistance Section ("Section") of the Department, pursuant to COMAR 26.23.04. Permanent wetland impacts from the stream restoration sites will be replaced at a 1:1 ratio at the respective restoration sites. The White Marsh Wetland Mitigation Site is located adjacent to Route 40 between Reames Road and White Marsh Boulevard in Baltimore County. The Carsin's Run Stream Restoration Mitigation Site is located within the MDTA right-of-way just north of the I-95/MD 22 interchange and west of I-95 in Harford County. The MD 7 Fish Passage Stream Restoration Site is located adjacent to West Old Philadelphia Road approximately 2,000 feet southwest of the MD 7/Wells Camp Road intersection in Cecil County. On-site stream restoration of WUS 18A is located with the MDTA right-of-way, just northwest of I-95 near mile marker 73.0 in Harford County. The Permittee shall successfully construct the mitigation site and meet project standards and other requirements, as specified in the Approval Letter and COMAR 26.23.04, in advance or concurrently with the activities authorized in this Permit. In the event of discrepancy with the mitigation requirements found in this Condition, the standards and requirements set forth in Approval Letter shall govern. The Permittee is required to notify the Section upon the start of grading and the completion of planting of the mitigation project. The Permittee shall submit monitoring reports for the mitigation project to the Section as specified in the Approval Letter. If the Permittee as stated in the Permit, changes, the Permittee must notify the Section. If the mitigation obligation is to be transferred to another party, the Permittee must notify the Section.

7. X The certification holder shall provide a stream restoration plan for review and approval by Water and Science Administration. The approved plan shall be implemented by the Maryland Transportation Authority.
8. X At least one culvert in every culverted stream crossing shall be depressed at least one foot below the existing stream bottom under the low flow condition. A low flow channel shall be provided through any riprap structures. The culvert shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species.
9. X Stormwater Discharges: Stormwater discharges from ponds, stormwater management outfalls, and stormwater facilities shall have a velocity of no greater than four feet per second for the two year storm in order to prevent erosion in the receiving water or wetland.
10. X Future Stormwater Discharges: Future stormwater discharges to authorized pond(s) are prohibited unless the required volume of stormwater runoff from impervious surfaces is managed in uplands for effective pollutant removal.
11. Stormwater Detention Ponds: Authorized stormwater detention or extended detention ponds shall have a maximum detention time of for temporarily impounded stormwater volumes in excess of any permanent pool elevations or pond bottom.
12. Integrated Pest Management: An Integrated Pest Management Plan for any proposed golf course shall be developed in accordance with the University of Maryland Department of Entomology.
13. X Stormwater Drainage Facilities: Stormwater management and drainage facilities shall be maintained in accordance with the requirements of the applicable approving authority.
14. X Use of Stormwater Management Facility: Stormwater management facility may not be used until all stabilization is completed and all temporary sediment control devices have been removed.

15. ____ Maintenance of Stormwater Management Facility: If maintenance of a stormwater management facility is the responsibility of a homeowner's association, maintenance shall be conducted according to County specifications.

Failure to comply with these conditions shall constitute reason for suspension or revocation of the Water Quality Certification and legal proceedings may be instituted against the certification holder in accordance with the Annotated Code of Maryland. In granting this certification, the Department reserves the right to inspect the operations and records regarding this project at anytime.

CERTIFICATION APPROVED



Denise M. Keehner
Program Manager
Wetlands and Waterways Program

cc: Steve Elinsky, United States Army Corps of Engineers
MDE Compliance Program